



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/653,053	09/01/2000	Peter S. MacLeod	07844-357001	5505	
21876 7590 01/25/2005			EXAM	EXAMINER	
	ARDSON P.C.		NGUYEN, MADEL	EINE ANH VINH	
3300 DAIN RAUSCHER PLAZA MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER	
			2626		

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary		09/653,053	MACLEOD, PETER S.		
		Examiner	Art Unit		
		Madeleine AV Nguyen	2626		
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the c	orrespondence address		
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin bly within the statutory minimum of thirty (30) day I will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).		
Status					
1)	Responsive to communication(s) filed on	·			
2a)⊠	This action is FINAL . 2b) ☐ Thi	s action is non-final.			
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposit	ion of Claims		•		
5)					
Applicati	on Papers				
9)[The specification is objected to by the Examin	er.	•		
10)⊠	The drawing(s) filed on 8/9/05 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E		• • • • • • • • • • • • • • • • • • • •		
Priority ι	ınder 35 U.S.C. § 119				
a)(Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureates the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received in the contract of the contract	on No ed in this National Stage		
Attachmen		0 □ to 1 · 0	(DTO 442)		
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.					
3) 🔲 Infon	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date		ratent Application (PTO-152)		

DETAILED ACTION

This communication is responsive to amendment filed on August 09, 2005.

Applicant amends the drawings, the specification and claims 1, 5, 6, 11, 12, 22, 26, 27, 32, 33, 43, 47, 48, 51, 52, 53, 54, 58, 60, 62, 63.

Response to Arguments

Applicant remarks that Kumada does not disclose a method for automatically selecting a rendering intent based on the color characteristics of the device as amended in the claims.

Instead, Kumada discloses automatically selecting a gamut mapping mode using a rendering intent. In Kumada the rendering intents are "included in the header of a source profile."

In the Abstract of the Invention, Kumada teaches "input data which is dependent on a color space of an input device is converted by a first conversion LUT to color space data which is independent of any devices, based on viewing condition at the time of viewing an input original. The device independent data is converted to data in the human color perception space by a forward converter, subjected to gamut mapping, and converted back to device independent data in the color space independent of any devices by an inverse converter, based on a viewing condition at the time of viewing an output original." From Fig.19, the viewing condition of the input and output devices can be luminance, illuminant, ambient light. In Fig.3, Kumada teaches reference numeral 43 denotes a gamut mapping mode selection portion for selecting whether the gamut mapping is performed in the JCH color perception space (perceptual, relative colorimetric or saturation rendering intents) or in the QMH color perception space (absolute colorimetric

Application/Control Number: 09/653,053 Page 3

Art Unit: 2626

rendering intent) in accordance with designation by a user or designation by the profile (col. 7, lines 62-66; col. 9, line 60 – col. 10, line 3). The input profile includes a viewing condition 1 and the output profile includes a viewing condition 2. Since the viewing conditions of the input device or output device are color characteristic of the device which are defined by the device color profile, we can conclude that Kumada discloses a method for automatically selecting a rendering intent (perceptual, relative colorimetric, saturation, or absolute colorimetric rendering intent) based on the color characteristics of the device (viewing condition such as luminance, illuminant, ambient light) as amended in the claims.

It is right that "In Kumada the rendering intents are "included in the header of source profile" as remarked by the Applicant. However, the plurality of rendering intents, such as perceptual, relative colorimetric, saturation, absolute colorimetric rendering intents, are included in the header of the source or destination profile is for the automatic selection of one rendering intent based on the viewing condition of the source or destination profile (col. 9, line 60 – col. 10, line 52).

Applicant's arguments filed on August 09, 2005 have been fully considered but they are not persuasive.

The rejection of the claims is modified due to the amendments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 4

2. Claims 1-2, 11-13, 22, 23, 32, 33, 43, 44, 53, 54, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada et al (US Patent No. 6,459,436).

Concerning claims 1, 22, Kumada discloses a method comprising identifying a device color profile associated with a device; and automatically selecting a rendering intent based on the viewing condition of the device wherein the viewing condition is defined by the device color profile (Figs. 1-3, 19; Abstract; col. 7, line 57 – col. 8, line 11; col. 8, line 56 – col. 10, line 6).

It is noted that a gamut mapping mode can be automatically selected by rendering intents included in the profile. The following selection is made in the automatic selection according to the profile: perceptual, relative colorimetric, saturation, or absolute colorimetric rendering intent (col. 9, line 60 - col. 10, line 3).

Kumada does not teach that the viewing condition is the color characteristics of the device. However, from Fig.19, the input or output viewing conditions are the luminance, illuminant, ambient light which are the color characteristics of the input and output devices. It would have been obvious to one skilled in the art at the time the invention was made to consider that Kumada teaches the step of automatically selecting a rendering intent based on the color characteristics of the device which are defined by the device color profile since the viewing conditions of the input and output devices are also color characteristics of the device and they are defined by the input or output profile.

Concerning claims 2, 11, 12, 23, 32, 33, Kumada further teaches that the device is a device to be emulated (Figs.1, 2).

Concerning claims 43, 44, 53, 54, Kumada discloses a computer program product comprising instructions operable to cause a processor to do the steps disclosed in claims 1, 2 above.

3. Claims 3, 4, 24, 25, 45, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada as applied to claims 1, 22 above, and further in view of Hobub (US Patent No. 6,043,909).

Concerning claim 3, 24, 45, 46, Kumada fails to teach that the selection intents are used for printing press. Hobub discloses a system and method for color reproduction wherein a selection of rendering intents (col. 35, lines 30-33) are used with printing presses (col. 1, lines 6-10). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Hobub to the method in Kumada since they are from the same field of endeavor and thus constitute analogous art, being that color rendering intent in printing devices while Kumada does not limit any device for reproduction such as printing device.

Concerning claim 4, 25, Kumada further teaches the step of receiving a selection indicative of the device color profile (col. 7, lines 62-66).

4. Claims 13, 34, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada as applied to claims 1, 22 above, and further in view of Koguchi (US Patent No. 5,578,824).

Concerning claims 13, 34, 55, Kumada fails to specifically teach that the profile is a printing press color profile or a proofing printer color profile. Koguchi discloses an image

devices.

forming system and method with a selection of the color profile of an input or output device (col. 32, lines 49-53, 56-59) wherein the profile of the press 130 and the profile of the proof printer 134 are used by the color calibration service center 140 (col. 30, lines 52-62). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Koguchi to the method in Kumada since they are from the same field of endeavor and thus constitute analogous art, being that of color rendering intent in printing devices while Kumada does not limit any device for reproduction such as printing press or printing proof

Page 6

5. Claims 18-21, 39-42, 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada as applied to claims 1, 22, 43 above, and further in view of Spaulding (US Patent No. 5,539,540)1.

Concerning claims 18, 39, Kumada fails to teach the step of selecting a first rendering intent when a color gamut of the printing press is substantially contained within a color gamut of the proofing printer, and selecting a second rendering intent otherwise. Spaulding, in the same field of endeavor, discloses a method for transforming input color values to output color values using different gamut mapping or rendering intent techniques in different cases when one gamut is largely contained within another and when one gamut is largely exclusive based on the input and output devices (Figs.9-12, col. 2, lines 43-58). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Spaulding to the method of Kumada teaches different input and output devices with different profiles and the

automatic selection of different gamut mapping techniques based on the rendering intents for gamut mapping.

Concerning claims 19-21, 40-42, 60-63, Kumada further teaches the selection of perceptual rendering intent (gamut mapping mode in JCH color space), a colorimetric rendering intent (relative colorimetric rendering intent for gamut mapping mode in JCH color space or absolute colorimetric rendering intent for gamut mapping mode in QMH color space) or a composite rendering intent (col. 9, line 60 – col. 10, line 53).

Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

- 6. Claims 5-10, 14-17, 26-31, 35-38, 47-52, 56-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is an Examiner's Statement of Reasons for Allowance: Claims 5-10, 14-17, 26-31, 35-38, 47-52, 56-59 are objected over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches the method as claimed in claims 1, 22, 43 further comprising the steps of determining a minimum luminance the printing press can produce and selecting one of a plurality of rendering intents based on a comparison of the minimum luminance to one or more predefined thresholds.

Application/Control Number: 09/653,053 Page 8.

Art Unit: 2626

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 24, 2005

Madeleine AV Nguyen Primary Examiner Art Unit 2626